



## **BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION**

### **COMMENTS AND RECOMMENDATIONS OF THE MINNESOTA OFFICE OF ENERGY SECURITY ENERGY FACILITY PERMITTING STAFF**

DOCKET No. IP6684/WS-08-1448

Meeting Date: November 23, 2010

Agenda Item # \_\_\_\_\_

Company: Buffalo Ridge Power Partners, LLC

Docket No. IP6684/WS-08-1448

#### **In the Matter of the Application of Buffalo Ridge Power Partners, LLC, for an up to 138 MW Large Wind Energy Conversion System in Yellow Medicine and Lincoln Counties**

Issue(s): Should the Commission issue a site permit for a 138 MW Large Wind Energy Conversion System in Yellow Medicine and Lincoln counties?

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#### **Relevant Documents**

Buffalo Ridge Power Partners Site Permit Application ..... October 13, 2009  
Public Comments 1-12.....April 28, 2010  
ALJ Summary of Public Comments and Recommendation.....May 3, 2010  
Buffalo Ridge Power Partners Letter.....November 4, 2010

The enclosed materials are work papers of the Department of Commerce Office of Energy Security Energy Facility Permitting Staff. They are intended for use by the Public Utilities Commission and are based on information already in the record unless otherwise noted.

This document can be made available in alternative formats; i.e. large print or audio tape by calling (651) 201-2202 (Voice) or 1-800-627-3529 (TTY relay service).

## **Documents Attached**

1. Bitter Root Wind Farm Project Site Maps (constraint maps and turbine layout maps)
2. Proposed Findings of Fact, Conclusion of Law and Order
3. OES EFP Staff Exhibit List
4. Proposed Site Permt

(Relevant documents and additional information can be found on eDockets (08-1448) at <https://www.edockets.state.mn.us/EFiling/search.jsp> or the Commission website <http://energyfacilities.puc.state.mn.us/>)

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## **Statement of the Issues**

Should the Public Utilities Commission (Commission) issue a site permit for the proposed 138 MW Large Wind Energy Conversion System in Yellow Medicine and Lincoln counties?

## **Introduction and Background**

Buffalo Ridge Power Partners, LLC (Applicant or BRPP), has submitted a site permit application for a proposed 138 megawatt (MW) wind farm in Yellow Medicine and Lincoln counties (Exhibit 1). Buffalo Ridge Power Partners, LLC, a Delaware limited liability company based in Minneapolis, is a joint venture of ACCIONA Wind Energy USA, LLC, and Global Winds Harvest, LLC. The Applicant anticipates that the Project will be owned and operated exclusively by ACCIONA Wind Energy once constructed and commercially operable. Neither the Applicant nor any of its related entities own or operate any other LWECS in Minnesota.

### ***Project Location and Land Control***

The Applicant proposes to locate the Bitter Root Wind Farm Project (Project) west and southwest of the city of Canby and has identified a Project Area of approximately 35 square miles (22,500 acres) located in Fortier and Florida townships of Yellow Medicine County and Hansonville Township in Lincoln County (see attached map). Depending upon final design, the Applicants anticipate that the Project would occupy approximately 120 acres. BRPP controls approximately 11,100 acres within the project site boundary under Option to Lease Agreements with 51 landowners, sufficient to allow siting flexibility to ensure that appropriate setbacks are met. Attachments 1A and 1B to the site permit show Project boundaries and preliminary layouts for layouts using either 1.5 MW turbines or 3.0 MW turbines.

### ***Project Description***

The Applicant proposes to use up to 92 1.5 Megawatt (MW) wind turbine generators, or up to 46 3.0 MW wind turbine generators. In addition to the turbines, the proposed Project would consist of:

1. Associated turbine access roads and electric collector lines;
2. Up to three (3) permanent meteorological towers;

3. An operations and maintenance building;
4. A project substation; and
5. An interconnect to the transmission grid;

The Applicant anticipates that construction of the Project will begin in early 2012, with commercial operation expected by the end of 2012.

## **Regulatory Process and Procedures**

A site permit from the Commission is required to construct an LWECS, which is any combination of wind turbines and associated facilities with the capacity to generate five megawatts or more of electricity. This requirement became law in 1995. The Minnesota Wind Siting Act is found at Minnesota Statutes chapter 216F. The rules to implement the permitting requirement for LWECS are found in Minnesota Rules chapter 7854.

### ***Certificate of Need***

Because the Project is larger than 50 MW, it is considered a large electric power generating plant under Minnesota Statute 216B.2421 and a Certificate of Need (CN) from the Commission is required for the Project under Minnesota Statute 216B.243. The Applicant applied to the Commission for a Certificate of Need for the Project on April 27, 2009, and the Commission accepted the application as complete in its order of July 17, 2009. A combined hearing on the certificate of need and issues related to the site permit was held in Canby on March 30, 2010. The Commission granted a Certificate of Need for the proposed project in its order of June 10, 2010.

### ***Site Permit Application Acceptance***

BRPP filed an application with the Commission for a LWECS site permit on October 13, 2009 (Exhibit 1). The Commission accepted the application as complete in an Order issued November 13, 2009 (Exhibit 3). On November 12, 2009, the Applicant distributed the EFP notice of application acceptance and the site permit application pursuant to Minnesota Rules 7854.0600, subparts 2 and 3, which included landowners within the Project boundaries, county board, city councils, township boards, local newspapers, and the Minnesota Historical Society (Exhibits 5 and 6). This notice was also published on eDockets and the Commission's Energy Facility Permitting Website. A Notice of Application Acceptance was also published in the *Canby News* on November 18, 2009 (Exhibit 4).

In practice, Office of Energy Security (EFP) staff also distributes copies of the application along with a cover memo requesting comments on the application or the project to technical representatives from state agencies that may have permitting or review authority over the project. A Notice of Application Acceptance was distributed to the state agency technical representatives on November 19, 2009.

### ***Preliminary Determination on Draft Site Permit***

Pursuant to Minnesota Rule 7854.0800, the Commission has 45 days after application acceptance to make a preliminary determination on whether a draft site permit may be issued or denied. On December 21, 2009, the Commission issued its order granting variance to this rule to extend the

period to make a preliminary determination on whether a permit may be issued in order for the Applicant to provide the Commission with additional layout information for both the 1.5 and 3.0 MW turbines (Exhibit 9). The Applicant provided this information to the Commission, and on March 9, 2010, the Commission issued an order authorizing a preliminary draft site permit and approved distribution of the proposed draft site permit for comment under the public participation process outlined in Minnesota Rule 7854.0900 (Exhibit 11). On March 30, 2010, the Commission issued an Erratum correcting language in the Draft Site Permit (Exhibit 12).

Notice of draft site permit availability and the public hearing covering both the certificate of need and the issues related to the site permit was sent to all persons or agencies that received a copy of the permit application, was published in the *EQB Monitor*, the *Canby News*, and the *Hendricks Pioneer* and was posted on eDockets and on the Commission's Energy Facility Permitting Website (Exhibits 13, 14, 15, and 16).

### **Public Participation Process and Public Comments**

Public participation in the LWECS site permitting process is guided by Minnesota Rule 7854.0900. EFP staff received two written comments before the December 1, 2009, close of the comment period following acceptance of the site permit application (Exhibit 7).

A public hearing on both the application for the Certificate of Need and the application for an LWECS site permit was held on March 30, 2010, in Canby. The meeting was presided over by Administrative Law Judge Steven Mihalchick. The meeting provided members of the public with an opportunity to learn about the proposed project and the Commission's role in review and approval of LWECS and to ask questions of the applicant and EFP staff. The meeting was also an opportunity for the public to offer comments on the permit application and draft site permit, which serve as the environmental documents for the project.

Approximately 13 people attended the meeting. Questions and comments at the meeting were related to noise, aesthetics, role of local units of government in the review of the process, availability of transmission capacity, turbine size, and impacts on plant and wildlife species. A complete record of the meeting including all comments, questions, and answers is documented in the public meeting transcript (Exhibit 17).

Twelve comments were received by the comment deadline of April 21, 2010. The comments received expressed support for the Project as well as concerns about concern with noise, aesthetic impacts, use of 3.0 MW turbines, involvement of local governments, impacts to wildlife and sensitive natural resources, and local wind ordinances.

Minnesota Rule 7854.0900, subp. 5, provides the opportunity for any person to request that a contested case hearing be held on the proposed LWECS project. During the comment period one request for a contested case hearing on the proposed project was submitted during the prescribed comment period. The Commission issued an order denying the request for a contested case hearing on June 11, 2010 (Exhibit 21).

## **OES EFP Staff Analysis and Comments**

OES EFP staff addresses oral and written comments by category of issues raised and how the proposed site permit or other jurisdictions address the issue.

### **Emergency Services**

**Fire Protection:** In its comment letter, the Southwest Regional Development Commission (SWRDC) pointed out that the heading of “Fire Protection” at III.B.16, of the Draft Site Permit might more properly be termed “Emergency Services.” SWRDC also requested that BRPP provide training for local emergency service providers.

*EFP Staff Response:* The heading at Section 7.16 of the site permit has been changed to “Emergency Response.” BRPP has agreed to work with the local first responders (Fire, EMS, Law Enforcement) to provide training and information about how to best respond to incidents at the Project; the nature and extent of this training will be determined in coordination with the O&M staff and the first responders in development of the Emergency Response Plan required under this section.

### **Turbine Types**

In its letter of April 21, 2010, DNR staff expressed a preference for 3.0 MW turbines, in order to reduce the overall number of turbines and potential for habitat fragmentation. One written comment and oral comments received at the hearing expressed concern about the use of 3.0 MW turbines that have not been commercially installed.

*EFP Response:* EFP staff notes DNR staff’s preference for turbines, and also notes the reservations about using the 3 MW turbines noted by members of the public. Some of the concern related to the use of the 3.0 MW turbines is related to noise. The Project will be required to comply with noise standards identified in Minnesota Rules chapter 7030, regardless of what turbines are used, see site permit at Sections 4.2 and 4.3. Issues of noise are addressed in Findings 46 - 49.

### **Natural Resources**

In its letter of April 21, 2010, DNR staff identified several specific concerns related to the Project. These concerns can be grouped into concerns related to sensitive natural resources (such as native prairie, the Yellow Medicine Coteau Macrosite, and calcareous fens), public waters and public lands, and effects on birds and bats. Effects on wildlife were also brought up generally in the public hearing.

#### **Sensitive Natural Resources**

The DNR letter identified concerns with the Project. Areas of concern were related to the presence of calcareous fens, native prairie, and the Yellow Medicine Coteau Macrosite, a large area of significant prairies and a matrix of connecting grasslands, which overlaps a portion of the Project area.

The letter noted that calcareous fens are located within the Project area, although the layouts reviewed by DNR staff appear to avoid known fens. Calcareous fens are subject to special regulation under the Wetland Conservation Act. DNR staff also requested that any previously unidentified calcareous fens found during site surveys or construction be identified to DNR for incorporation into the DNR's Natural Heritage Information System.

*EFP Response:* The site permit contains a number of provisions to identify sensitive natural resources and to mitigate impacts to these resources. The site permit, at 6.1, requires that BRPP perform a biological survey of the potentially impacted areas for the presence of resources such as wetlands and native prairie and report those results to the Commission and to DNR prior to construction.

Issues related to native prairie and the Yellow Medicine Coteau Macrosite are addressed in Findings 83, 88, 89, and 90. The Applicant has committed to avoiding Native Prairie. The Prairie Protection and Management Plan (Section 4.7) that will be prepared for the Project requires the Permittee to identify measures taken to avoid areas identified as native prairie and measures taken to mitigate unavoidable impacts to native prairie. Section 13.2 requires that the Prairie Protection and Management Plan also identify efforts to avoid and minimize impacts to the Yellow Medicine Coteau Macrosite.

#### Public Lands:

The DNR letter noted that the Tatley WMA is not identified in site maps. The letter also identified the requirement for a license to cross public waters if any project infrastructure would cross any public water.

*EFP Response:* Site maps have been corrected to include the Tatley WMA.

#### Wildlife Impacts

The DNR letter expressed concerns related to the potential for turbines sited within native prairie or the Yellow Medicine Coteau Macrosite to act as a habitat barrier or cause avoidance behavior for wildlife using this landscape feature. The DNR's comments also noted the abundance of bird and bat habitat and expressed concern for flight barrier or collision risk as birds fly between habitats. The DNR comments recommended that the Project avoid siting turbines within the Yellow Medicine Coteau Macrosite or native prairie and that BRPP be required to perform additional pre-construction avian and bat surveys. The DNR comments also recommended a permit condition for post-construction mortality studies with DNR consultation.

*EFP Response:* A series of wildlife studies including, fixed-point bird use surveys, breeding bird transect surveys, a raptor nest survey, acoustic bat surveys, prairie grouse lek surveys, and incidental wildlife observations were conducted at the project site between late March, 2008, and early October, 2008. The results of those surveys are reported in Appendix F of the Site Permit Application (Exhibit 1). This information was summarized by the Applicant in their letter of November 4, 2010 (Exhibit 22), which concluded that, based on the information gathered in the wildlife studies and literature from Buffalo Ridge and other sites in the upper Midwest, avian impacts from the Project are anticipated to be similar to those from other wind projects evaluated in the literature. EFP staff believes that the information in the record thus far does not indicate a high probability for adverse impacts to birds. It is not clear what additional information further

pre-construction surveys for bird species would provide the Commission for their permit decision.

The bat monitoring did show a high level of bat activity. As the literature on impacts to bats from wind turbines is not as conclusive as the literature regarding avian impacts, it is not clear whether or not higher bat fatality would be expected from this Project compared to other projects. BRPP, in their letter of November 4, 2010, did acknowledge that, given the high level of bat activity identified in the surveys, additional pre-construction bat surveys are warranted. BRPP stated its willingness to work with the USFWS and DNR to design and implement additional pre-construction bat surveys.

Bases on the DNR's recommendation, the presence of numerous WMAs and WPAs, and the high level of bird and bat activity shown in the 2008 pre-construction surveys, EFP staff recommends that post-construction avian and bat monitoring be performed for the Project. The Permit, at Section 6.7, requires preparation of an Avian and Bat Protection Plan for the Project. Section 13 of the site permit directs BRPP to incorporate pre-construction bat monitoring and post-construction bird and bat monitoring into the Avian and Bat Protection Plan.

#### **Local government involvement and WECS standards**

The comments of the SWRDC requested that BRPP consult early with County Highway Departments to address road issues involved with the construction of the Project and that county highway and zoning administrators be invited to the pre-construction meeting. The SWRDC also requested that the permit language regarding turbine access roads be modified to specify that access roads be located, as well as constructed, in accordance with all necessary local and state road requirements and permits.

Both Lincoln and Yellow Medicine counties had passed resolutions assuming permitting authority for WECS projects under 25 MW, pursuant to MS 216F.08, at the time that the Draft Site Permit was approved for distribution. Both counties also have WECS ordinances that contain certain setbacks that are more stringent than those identified in the General Permit Standards. The Draft Site Permit identified these more stringent setbacks in a Special Condition.

In its comment letter of April 21, 2010, BRPP recommended that the Commission revise and clarify language in the special condition. To support their recommendation, BRPP provided information on the Lincoln County and Yellow Medicine County ordinances, and a letter from the Lincoln County Administrator clarifying the County's interpretation of their ordinance.

#### *EFP Response:*

EFP practice is to invite local units of government to the pre-construction meeting, and to provide opportunities for the local officials to participate in a location convenient to them, or by phone if that is their preference. The site permit, at Section 7.8 requires the Permittee to notify the state, county or township governing boards having jurisdiction over roads, as well as the Commission, of the roads that will be used during the construction of the Project. EFP staff has modified the site permit, at Section 7.8.2, to include the recommended change.

Based on the information provided by the Lincoln County Administrator, through BRPP's letter, the site permit clarifies the setback requirements from roads, trails and power lines, and other

rights-of-way recorded with the County, structures other than homes or dwellings, and Shoreland Districts. Because there are no other wind projects in the area of the Project, reference to setbacks from other project boundaries has been removed.

On March 23, 2010, the Yellow Medicine County Board passed a resolution rescinding its decision to permit WECS under 25 MW; the resolution made no changes to the WECS Zoning Ordinance. On August 10, 2010, the County Board adopted a new renewable energy ordinance which removed the wetland setbacks identified in the Draft Site Permit. The site permit, at Section 13.1.2, incorporates the road setbacks from the renewable energy ordinance; reference to setbacks from wetlands has been removed.

### **Other Comments**

Of the 12 written comments submitted into the hearing record, seven primarily expressed support for the Project. Other comments addressed issues of noise, aesthetics, and decommissioning of turbines.

*EFP Response:* EFP Staff notes the comments of support for the Project, but has no further response. Issues of Noise are addressed in Findings 46-48. Issues of Aesthetics are addressed in Findings 53 – 56. Decommissioning is addressed in Findings 98 – 100 and in the site permit at Section 9.

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Based on the record of this proceeding, EFP staff concludes that the Bitter Root Wind Farm Project meets the procedural requirements and the criteria and standards for issuance of a site permit identified in Minnesota Statutes and Rules. The site permit application has been reviewed pursuant to the requirements of Minnesota Statutes chapter 216F and Minnesota Rules Chapter 7854 (Wind Siting Rules).

In accordance with Minnesota Rule 7854.0500, Subp. 2, the Commission may not issue a site permit for an LWECS, for which a certificate of need is required, until an applicant obtains such a certificate from the Commission.

OES EFP staff has prepared, for consideration by the Commission, proposed Findings of Fact, Conclusions of Law, and Order (Attachment 2), an Exhibit List (Exhibit 3), and a proposed Site Permit (Attachment 4) for the 138 MW Bitter Root Wind Farm Project.

### ***Proposed Findings of Fact***

The proposed findings of fact, conclusion of law and order (see Attachment 2) address the procedural requirements and process followed, describe the project and address the environmental and other considerations of the project. The relevant site considerations addressed in the findings of fact (such as human settlement, public health and safety, noise, recreational resources, community benefits, effects on land based economies, archaeological and historical resources, animals and wildlife and surface water) track the factors described in the



Commission’s rules for other types of power plants that are pertinent to wind projects. The following outline identifies the categories of the findings of fact.

<b>Category</b>	<b>Findings</b>
Background and Procedure.....	1-14
Certificate of Need.....	15
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### ***Exhibit List***

OES EFP staff has prepared an exhibit list of documents that are part of the record in this permit proceeding. See Attachment 3.

### ***Proposed Site Permit***

The OES EFP staff has prepared a site permit for the Commission’s consideration. See Attachment 4. The conditions in the proposed site permit are consistent with conditions included in other LWECS site permits issued by the Commission.

The proposed site permit is different from the draft site permit issued by the Commission. The site permit headings and requirements have been reorganized and modified for clarity and conditions were added consistent with the findings for this Project.

## **Commission Decision Options**

### **A. Bitter Root Wind Farm Project Findings of Fact, Conclusion of Law and Order**

1. Adopt the attached proposed Findings of Fact, Conclusion of Law and Order prepared for the 138 MW Bitter Root Wind Farm Project in Yellow Medicine and Lincoln counties.

2. Amend the proposed Findings of Fact, Conclusion of Law and Order as deemed appropriate.
3. Make some other decision deemed more appropriate.

**B. LWECS Site Permit for the 138 MW Bitter Root Wind Farm Project**

1. Issue the proposed LWECS Site Permit for the 138 Bitter Root Wind Farm Project to Buffalo Ridge Power Partners, LLC.
2. Amend the proposed LWECS Site Permit as deemed appropriate.
3. Deny the LWECS Site Permit.
4. Make some other decision deemed more appropriate.

**EFP Staff Recommendation:** The staff recommends options A1 and B1.